



THE GARZETTE

W4GR

Volume 16, Issue 11

147.075+

444.525+5mhz

53.110 -1mhz

From the Presidents Mic!



QST! QST! de **WA4ZXV, Norm Schlar**

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Hamfest November 3 and 4, meeting November 13 and Holiday Party December 7.

Now, just as most of the rest of the year there is a lot going on with GARS and Amateur Radio in North Georgia. Recently we did presentation to Gwinnett County Science Teachers, Jamboree on the Air for the Scouts and many of you participated in the Simulated Emergency Test. And just around the corner is Techfest.

We have many new hams in the area, and fortunately several of them have become new members. Many existing members have additional privileges, on the air network participation is growing; the number of on the air opportunities with local hams is increasing. These are exciting times for our club and our hobby. As much as I love the hobby and working for it, all this means more work for the leadership. It's more important than ever that we share in the responsibilities of keeping up with the needs of the membership and the hobby. If you have a few minutes a month to help, let us know.

TechFest is an open, informative and free event. We need each of our members to get the word out. It's one of the only local events where we promote the hobby, and not the sale of the tools it requires. If you haven't attended before, it's a forum for displaying modes and methods of amateur radio. We'll have on display some of the "geewhiz" and gadgets used to communicate between amateur stations. We'll take questions, explain, touch. We'll cook and serve lunch for the whole group, we'll have space for sitting and discussing you amateur radio activities current, past and anticipated. There will be a tailgate area out in the parking lot. We'll have some classroom style forums. So be sure to promote and participate. TechFest is Saturday, January 12, 2008. Much more about TechFest on the web site.

The holiday party on December 7 requires reservations, so be sure to sign up at the November meeting, or send a note to Randy (N4COR) to reserve seats.

All area Hams or persons interested in Amateur Radio are invited to attend GARS meetings, so if you haven't joined a club and want to experience the fellowship that a club can bring, attend one or two of our meetings and learn firsthand that GARS is the place to be. Meeting on the Second Tuesday night of each month except December. View the web site for location and times.

73 and hp to c u sn.

November 2007

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			6m Club net @ 2100	1	2	3 Breakfast 0730 **SET**
4	5 2 m Club net @ 2000	6	7 6m Club net @ 2100	8	9	10 Breakfast 0730
11	12 2 m Club net @ 2000	13 club meeting 7:30 pm	14 6m Club net @ 2100	15	16	17 Breakfast 0730
18	19 2 m Club net @ 2000	20	21 6m Club net @ 2100	22	23	24 Breakfast 0730
25	26 2 m Club net @ 2000	27	28 6m Club net @ 2100	29	30	1 Breakfast 0730

The GARZETTE

The GARZETTE is the official monthly organ of the Gwinnett Amateur Radio Society serving its members and other persons interested in the advancement of the amateur radio art.

Original articles, art, and photos are invited and encouraged. Previously copyrighted submissions cannot be accepted for reprinting unless permission from the appropriate publisher is provided in writing along with the information being submitted. If reprints are from publications allowing their unrestricted use, please include a copy of the printed permission contained in the publication.

If possible, bring your articles to the monthly meeting in Microsoft Word format or email to ka4kkf@arrl.net. Artwork can be accepted in most any graphics format and can be submitted via email to the same address. Alternate means of submittal can be arranged when necessary. In keeping with the amateur radio spirit, permission is hereby granted for the reproduction of *The GARZETTE* articles by other amateur radio club newsletters provided that proper credit is given to the individual author and to *The GARZETTE*.

GARS Recurring Calendar

- Monthly club meeting is the 2nd Tuesday of the month at 7:30 PM. Check the Web Site for Location.
- Every Monday at 8 PM local time: GARS Want, Swap, Sell, and Information Net on the GARS 2 meter repeater
- Every Wednesday at 9 PM local time: GARS 6 meter net on the GARS 6 meter repeater
- Every Saturday at 7:30 AM local time: GARS Weekly Family Breakfast, Golden Corral Restaurant, Riverside Drive, Lawrenceville
- 20th of each month: Deadline for submittal of articles for the following month's GARZETTE

**Don't forget the Alford Hamfest
November 3rd and 4th**

Come by the table and say hello!

Techfest is Coming

The GARZETTE is published each month with the assistance of Hal Manning, who prints the news letter. Rick Patchin, KD4RFK does the final production work on *The GARZETTE* by folding & labeling. Bill Cherepay, WB4WTN, stamps and gets the end product to the Post Office each month. Norm Schklar, wa4zxv, manages email delivery. Many thanks to each of them and all article contributors. Deadline for submissions is the 20th of each month for inclusion in the following month's issue.

For any additional information contact:
Newsletter Editor:

David Adcock ka4kkf
(770-271-9398)
ka4kkf@arrl.net

All correspondence relating to articles posted in *The GARZETTE* or for information concerning advertising rates should be directed to the following address:

Gwinnett Amateur Radio Society
P.O. Box 88
Lilburn, GA 30048
Attn: Newsletter Editor

Metro Atlanta VE Exam Schedule

GARS publishes Metro Atlanta area VE exam schedules as a service and is not responsible for errors or changes. Call and confirm schedules before going. All sessions are walk-in. Take copies of current license and certificate of completed elements with you to all sessions. Find additional sessions online at www.arrl-ga.org

First Saturday, Even Months

9:00AM
EOC Building
Butch Nitz, AF4FS
(770) 968-8780

First Wednesday

7:00 PM
ARRL/VEC
Roberts School
4681 School Street,
Acworth
Jodi Escher AG4BK
770-387-1591

Second Tuesday

7:00PM
Walton EMC
3645 Lenora Church Rd,
Snellville
Wayne Taylor, WD4CCA
(770) 498-7759

Second Saturday, Odd Months

ARRL VEC
8:30 AM
Stone Mountain Methodist
Church
5312 West Mountain St.
Stone Mountain
Bob Varone, W4ETN
(770) 978-3179

Third Saturday

CA VEC
9:00AM
Marietta First United
Methodist Church Room 305,
56 Whitlock Ave
Marietta
David Still, WB4RRD
(770) 973-2566

Fourth Tuesday

ARRL VEC
7:00 PM
United Way Service Center
6279 Fairburn Road,
Douglasville

Third Sunday

W5YI VEC
3:00 - 5:00 PM
Gwinnett County Public
Library
2780 Five Forks Trickum Rd
Lawrenceville, GA 30044
770-978-5600
Headphones Provided! Howie
Gould, W9HG (770) 921-8362

Fourth Sunday

2:30 PM
Georgia Tech Student Center
Room 301
David Ziskind, KE4QLH
(404) 966-6864

Metro Atlanta Club Meetings**First Tuesday**

Kennehoochee ARC
Southern Polytechnic
State University
Meeting begins at 7:30 PM
Talk In 146.880 (-)

Second Monday

Georgia Tech ARC
Room W218
Van Leer Electrical
Engineering Bldg.
Georgia Tech Campus
Meeting at 7:00 PM

First Thursday

Atlanta Radio Club
Georgia Red Cross HQ
1955 Monroe Dr., Atlanta
Meeting is at 7:30 PM
Talk In -146.820 (-)

N.E. Georgia ARC

Commerce Public Library
Meeting is at 6:30 PM
Talk In - 147.225 (+)
PL 123.0

Second Thursday

Alford Memorial Radio Club
Annistown Road Baptist Church
Intersection of Annistown Rd
& Spain Rd
Stone Mountain
Dinner at 6:00 PM
Meeting at 7:30 PM
Talk In - 146.760 (-)

Third Tuesday**North Fulton Amateur Radio League**

Alpharetta EOC located at
2970 Webb Bridge Road, in Alpharetta
meeting at 7:30 PM
Talk In - 145.47 (-)

First Saturday

North GA QRP Club
Wieuca Baptist Church on
Peachtree Rd/Wieuca, 10 AM

October 2007 GARS General Meeting

October 9, 2007

The president, Norm Schklar, WA4ZXV, called the meeting to order at 7:30. Introductions of those present were made.

December 7, 2007 is the date for the GARS Holiday party – sign up sheet was passed around.

Dave Bruse, W4DTR, Program Manager, introduced the mini programs.

- a. Andrea Hartlage, KG4IUM, and Brittany Hancock, KI4WNY, gave a presentation on the youth lounge at the Alford Memorial Hamfest. Dave, W4DTR, made a motion that the club donate \$100 to help with the youth lounge. This motion was seconded and passed.
- b. Mike Swiderski, K4HBI, gave a talk on problems with power poles. Some fail when used in mobile applications.

Dave, W4DTR, introduced Brian Page, N4TRB, who gave a very interesting program on his recent visit to the Radio Society of Great Britain (RSGB). The program was so interesting that it was continued after the break.

Break

Amy Woodrick, KE4IKF, treasurer, was not present but her report was available for anyone to review.

Thanks were given to those who helped out with Scout Land. Approximately 125 scouts were present.

One new member, Johnny Beckman, W4BTX, extra class and the best weatherman ever, was voted into full membership.

Earl Whatley, AF4FG, vice president, announced that on October 19 there would be an opportunity to demonstrate amateur radio to the science teachers of Gwinnett County.

Norm, WA4ZXV, announced that elections would be in February and there were two positions without incumbents, Program Manager and Treasurer.

Dave, W4DTR, announced that there would be a VE session on October 21 at the Gwinnett County Library on Five Forks Trickum Road, and that the November meeting would feature Mike Boatright, KO4WX speaking on QRP.

Norm, WA4ZXV, announced that there would be a GARS homecoming meeting in the near future.

Prize drawings were held.

The program was resumed.

The meeting was adjourned at 9:14.

Prepared by Randy Collins, secretary

N.V.I.S LXPedition A Success

by

Kyle W4KDA

On the evening of October 20th, Bill KB4KFT, went to Tennessee and set up a portable 80m dipole for NVIS operation as part of an experiment which several GARS members participated in. NVIS stands for Near Vertical Incidence Skywave, and is used for local communications on HF frequencies. Unlike the DX form of skywave communication where the radiation lobes are aimed at the horizon, NVIS has a typical range of 0 – 300 miles, without the “skip zone” because the power is directed nearly straight up and reflects nearly straight down. Setting up and using NVIS is challenging, but can be useful for intrastate communication without the need for repeaters.

At club meetings and on various 2m and 6m nets, several of us had discussed experimenting with NVIS. After a previous failed attempt near Savannah (due to uncooperative weather), Bill volunteered to set up a portable NVIS station in Tennessee and he set up a schedule of times and frequencies before he left. Doug KB6RRX, Arnold KC4ZUA, Norm WA4ZXV, and Kyle W4KDA were at this end calling Bill and listening for his signal. On Bill's second antenna configuration we established a solid contact between our area and Bill's QTH on 3.865MHz.

Measured by GPS, the distance from Bill's QTH to his home in Duluth was 186 miles. For the most part, the signals were strong, so we experimented with power. The path was good enough to work both directions with as little as 10W. At the Georgia end, we were all able to hear Bill at relatively the same level in Auburn, Walnut Grove, Norcross, and Buford; our relative altitudes and surroundings had little if any affect on the signal path.

Overall, the test was a success. It was a learning experience, and a lot of fun. Thanks to all who participated, and especially KB4KFT for braving high winds and cold weather to make this exercise happen.

Upcoming Programs

November 13th - Mike Boatright (KO4WX) QRP

December Party

January 8th - Ray Back (KI4GRJ) - Venture Crew 73 and

Susan Swiderski (AF4FO) - ARRL year in review and what's coming up in 2008

February 12th - Elections & More - Stay Tuned!

Local 6 Meter SSB Event

by

Kyle W4KDA

Coming up, on November 7th, at 8:00PM local time, we are going to have a special 6 meter experimental net. We only plan to have this net one single time. This net will have a primary net control, and three secondary net controls. The goal will be to check in and give signal reports to as many stations as possible during the drill. In some ways, this exercise will run more like a contest than the typical 2m nets you are used to. Yes, we will be giving signal reports, and encourage check in by relay. The net control stations will be located in Buford, Lilburn, and Duluth. We will be running both vertical and horizontal polarization net control stations with both omni-directional and directional antennas. Even if you think you are too far away, even if you think your antenna is too low, even if you think you do not have enough power, we would ask that you try to make contact with us during this one time event. This event should be a good test of your equipment and also has usefulness for emergency communications.

Why 6 meters? The larger 6 meter antennas are arguably better for weak signal work, and stations are more likely to be able to work 6m SSB than SSB on other VHF or UHF frequencies. At least for the next few years in the solar cycle, 6m SSB gives us the ability to communicate between local stations when FM repeater or FM simplex will not work because the signals are too weak. Later in the solar cycle, the more frequent sporadic E may make 6m less attractive for local SSB communications.

So mark your calendars, cut your antennas, and test your rigs. This drill will be right after the local hamfest, so keep that in mind when you are scavenging the bone yard. Here are the specifics about what should be a fun and educational experience:

8:00PM – 8:45PM Local Time

November 7th, 2007

50.145 USB

Vertical or Horizontal

Please forward any questions to kyle@kandka.com.

A new 10 meter net has started up on 28.330 MHz USB. The net will start at 9:00 pm each Saturday evening. The net is called the Martini Net. It's a great opportunity for those with new HF privileges or just discovering the 10 meter band. The net will be very informal and geared toward ragchewing.

All are in invited to join in and give it a try.

John
WB4QDX

In an order for some PowerPole connectors, I received notice of a new product from Powerwerx (<http://www.powerwerx.com>) - the Automatic Power Off Switch. This is a voltage-sensing, solid-state switch that disconnects equipment from a dc power source when the voltage drops below a selectable threshold for a settable period. This would be a good way to keep from draining your car's battery by leaving the rig on, among other things.

MIT Researchers Improve 'tractor Beam'

By BRIAN BERGSTEIN –

CAMBRIDGE, Mass. (AP) — Taking up the sci-fi staple of "tractor beams," scientists have developed a way to use light to grab and move minuscule particles on a microchip. The research could lead to fine-grained biological sensors and other precisely built nanoscale devices.

The work by Massachusetts Institute of Technology researchers could extend the possibilities for "optical tweezers" — super-focused beams of light that have been used for years to study and manipulate tiny biological structures or even individual atoms. Optical tweezers have been used on transparent media — like a microscope slide — that let the light shine through and hold objects in a tractor beam-like embrace. (This is possible because light's individual photons transfer minuscule amounts of force to particles they hit.) What's new in the optical tweezer from MIT's Matt Lang and David Appleyard is the use of infrared light. Unlike visible light, the infrared does not bounce off the silicon used as the basis for microchips. That means that MIT's optical tweezer can be used not just for study but to build structures on the surface of chips. Lang and Appleyard proved their technique by getting 16 live E. coli cells to spell out "MIT" on a chip. The long-term potential is more practical: Lang envisions using the system to cram high-resolution sensors in very small spaces — for disease detectors, for example — and to connect silicon-based electronics to living tissues and other "biological interfaces." "That's sort of wide open," said Lang, a professor of biological engineering and mechanical engineering. The research is being published in an academic journal, Lab on a Chip. Arthur Ashkin, a retired Bell Laboratories scientist who is considered the father of optical tweezers, cautioned that the MIT work could not be considered a breakthrough, since no devices using the technology have yet been built.

Internet tax moratorium goes to Bush

By JOHN DUNBAR

ASSOCIATED PRESS WRITER

WASHINGTON -- A bill to extend a moratorium on Internet access taxes for seven years was approved 402-0 by the House Tuesday, less than two days before it was set to expire.

The House initially approved a four-year ban, but last week the Senate passed a seven-year prohibition, despite considerable support for a permanent ban.

"Seven years is better than nothing, and that's what we're doing today," said Rep. Fred Upton, R-Mich, during remarks on the House floor.

A House bill that would make the moratorium permanent has 238 House co-sponsors, more than a majority.

The tax ban, first approved in 1998 and twice renewed, is set to expire Nov. 1.

Support for a permanent ban was strong in both the House and Senate, but concerns over the potential long-term impact on state and local governments forced a compromise.

The provision amounts to a moratorium on state and local taxes, said David Quam, director of federal relations with the National Governors Association. And with the Internet changing rapidly, the issue should be revisited periodically, he said. "The implications could be pretty severe down the road if they got that wrong," he said. "It's actually a decent compromise that state and local governments and industry helped craft."

Rep. Linda Sanchez, D-Calif. called the bill "bipartisan legislation at its best" and noted it was supported by businesses, state and local government organizations and labor unions.

In addition to lengthening the ban from four years to seven years, the legislation also contains a provision aimed at preventing state and local governments from assessing taxes beyond those levied on simple Internet access.

At the urging of Sen. Ron Wyden, D-Ore., the legislation specifically prohibits taxation on e-mail and instant messaging services "that are provided independently or not packaged with Internet access."

The extension also exempts some states that approved taxes prior to the original enactment.

Sen. John Sununu, R-N.H., supported a permanent ban, but helped craft the seven-year compromise. "Seven years is better than we've ever done before," he told The Associated Press. "I think that's an important place to start."

The bill now goes to the White House for President Bush's signature.

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**We meet the second Tuesday
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prior to the GARS meeting at
St. Marguerite D'Youville
Church..**

For more information Visit
www.gars.org/crew73
or contact Ray Back:

Email crew73@gars.org
Phone (770) 295-9174

GARS Communication System

70 Cm Repeater

444.525(+) MHz
82.5 PL Tone

APRS

144.390 -- 1200 Baud
W4GR

6 Meter Repeater

53.110 (-1 MHz)
82.5 PL Tone

2 Meter Repeater

147.075(+) MHz
82.5 PL Tone

Main Repeater Site

Oak Street, Lawrenceville

Backup Repeater Site

Lanier Mountain, Snellville

Remote Receive Sites

Bogan Road, Buford

Goshen Springs Road,
Norcross

Lanier Mountain, Snellville

Net Needs Net Control Operators!

If you would like to be net control and learn how to operate the net, contact Scott, KF4PWI. We are looking for 2m and 6 m net control operators to fill in the empty spaces in the rotation.

kf4pwi@arrl.net

GARS

APPAREL ORDER FORM

NAME: _____ PHONE # _____

CALL: _____

NAME TO BE EMBROIDERED: _____

CALL SIGN TO BE EMBROIDERED: _____

ITEM	SIZE	QUANTITY	PRICE	TOTAL
T-SHIRT				
Red WITHOUT name & call			\$20.00	
White WITHOUT name & call			\$20.00	
Red WITH name & call			\$20.00	
White WITH name & call			\$20.00	
GOLF SHIRT -- WITHOUT name & call				
Red			\$24.00	
White			\$24.00	
GOLF SHIRT -- WITH name & call				
Red			\$28.00	
White			\$28.00	
SWEATSHIRT				
Red WITHOUT name & call			\$30.00	
White WITHOUT name & call			\$30.00	
Red WITH name & call			\$30.00	
White WITH name & call			\$30.00	
LIGHTWEIGHT JACKET -- RED ONLY				
WITHOUT name & call			\$31.00	
WITH name & call			\$35.00	
HEAVYWEIGHT JACKET -- RED ONLY				
WITHOUT name & call			\$41.00	
WITH name & call			\$45.00	
GARS BADGE -- WITH name & call			\$9.00	
HAT -- WITHOUT name & call				
Red			\$9.00	
White			\$9.00	
HAT -- WITH name & call				
Red			\$14.00	
White			\$14.00	

TOTAL ORDER PRICE: _____

Please attach your check made payable to GARS and return to Amy Woodrick, KE4IKF or mail to:

GARS
P.O. Box 88
Lilburn, Georgia 30048

NOTE: Please allow at least 4 weeks for delivery of items. Some items may need to be special ordered.

Thanks and 73s! -- Amy KE4IKF

Gwinnett Amateur Radio Society
P.O. Box 88
Lilburn, GA 30048

MEMBERSHIP APPLICATION

NEW MEMBER

RENEWAL

Amateur Call Sign _____	License Class	Novice	Technician	General
		Advanced	Extra	

Name _____

Address _____

City _____ State _____ Zip _____ - _____

Email address _____

Home Telephone _____ Work Telephone _____

Cell Telephone _____ **Date of Birth** ____/____/____ (mm/dd/yy)

ARRL Member	Yes	No	Life
-------------	-----	----	------

Interests _____

I prefer to receive the GARZETTE newsletter by: US Mail Email (please check only one)

Type of Membership

Individual \$30.00 annually
Student \$15.00 annually
Senior \$15.00 annually (over age 65)
Family ** \$35.00 annually

**** Available for family members residing at the same address**

Optional Contributions

Repeater Fund \$ _____

Scholarship Fund \$ _____

Additional Family Members **

Name _____ **Date of Birth** ____/____/____ (mm/dd/yy)

License Class	Technician	General	Extra	ARRL Member	Yes	No	Life
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Interests

Name: _____ **Date of Birth** ____ / ____ / ____ (mm/dd/yy)

License Class	Technician	General	Extra	ARRL Member	Yes	No	Life
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Interests

I agree to abide by the By-Laws of the Gwinnett Amateur Radio Society and understand that membership is subject to the approval of the Club.

Applicant Signature _____ **Date** / /

GARS Appreciates these fine sponsors that support our great organization!

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Mark KJ4VO

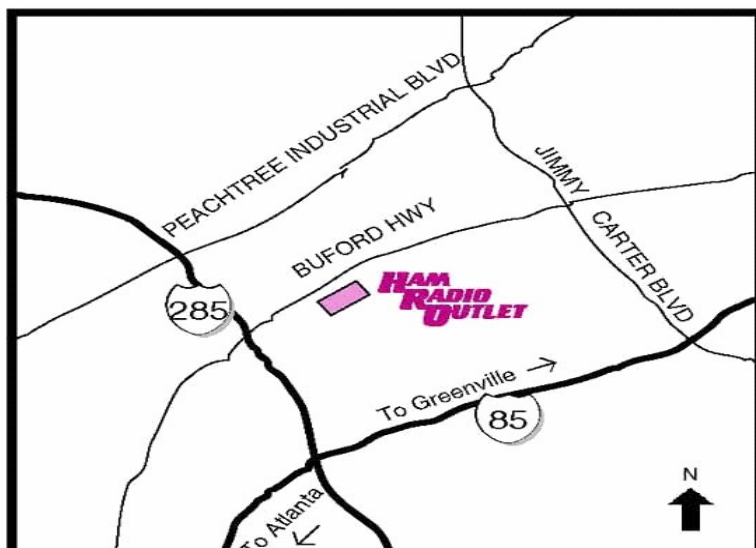
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Premier
Valor
Van Gorden

Gwinnett Amateur Radio Society
P.O. Box 88
Lilburn, GA 30048



To receive the **Garzette** via e mail contact, please contact the membership chairman

Saturday Morning

Breakfast

Join us at the Golden Coral
on Riverside Drive in

Lawrenceville at 7:30 a.m.

Next Meeting

Tuesday, November 13

The Meetings are on the
Second Tuesday of the
month 7:30pm at the
St Marguerite
D'Youville Church,
85 Gloster Rd NW,
Lawrenceville, GA 30044.
Just off Highway 29 SW of
Lawrenceville.

Directions on the Web
site.

<http://www.gars.org>

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**References available upon Request